



## INSTRUMENT APPROACH PROCEDURE CHARTS



## IFR TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

## Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude, and/or airports that have civil IFR takeoff minimums other than standard, are listed below. Takeoff Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or the applicable military volume, as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not specifically assigned a departure procedure (i.e., ODP, SID, or radar vector) as part of an IFR clearance, an ODP may be required to be flown for obstacle clearance, even though not specifically stated in the IFR clearance. When doing so in this manner, ATC should be informed when the ODP being used contains a specified route to be flown, restrictions before turning, and/or altitude restrictions.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard takeoff rules and establishes takeoff minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) takeoff minima are published below. For military takeoff minima, refer to appropriate service directives.

## NAME TAKEOFF MINIMUMS

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## ALICE, TX

ALICE INTL (ALI)

ORIG 04106 (FAA)

NOTE: **Rwy 17**, multiple poles beginning 601' from DER, 413' right to 340' left of centerline, up to 36' AGL/204' MSL. Multiple trees beginning 205' from DER, 348' left to 317' right of centerline, up to 26' AGL/194' MSL. **Rwy 26**, building 797' from DER, 366' left of centerline, 30' AGL/208' MSL. Tree 812' from DER, 301' left of centerline, 27' AGL/205' MSL. Rod on OL DME, 715' from DER, 258' right of centerline, 21' AGL/ 199' MSL. Steel post 83' from DER, 344' right of centerline, 4' AGL/181' MSL. **Rwy 31**, rod on OL DME 388' from DER, 256' left of centerline, 21' AGL/199' MSL. Tree 439' from DER, 608' left of centerline, 16' AGL/194' MSL. Steel post 2' from DER, 251' right of centerline, 164' AGL/181' MSL. Tree 1067' from DER, 359' right of centerline, 28' AGL/206' MSL. **Rwy 35**, windmill 1461' from DER, 164' left of centerline, 140' AGL/214' MSL. Bush 330' from DER, 287' right of runway, 14' AGL/185' MSL.

## ALPINE, TX

ALPINE-CASPARIS MUNI (E38)

AMDT 5 12208 (FAA)

TAKEOFF MINIMUMS: **Rwy 23**, NA - obstacles. **Rwy 19**, std. w/ min. climb of 432' per NM to 6900 or 1800-2½ for climb in visual conditions.

## ALPINE-CASPARIS MUNI (E38) (CON'T)

DEPARTURE PROCEDURE: **Rwy 1**, climb heading 029° to 5300 then climbing left turn direct BWR NDB, continue climb in BWR NDB holding pattern (hold N, LT, 194° inbound) to 8600 before proceeding on course. (ADF required) **Rwy 5**, climbing left turn direct BWR NDB, continue climb in BWR NDB holding pattern (hold N, LT, 194° inbound) to 8600 before proceeding on course. (ADF required) **Rwy 19**, climbing left turn direct BWR NDB, continue climb in BWR NDB holding pattern (hold N, LT, 194° inbound) to 8600 before proceeding on course. For climb in visual conditions, cross Alpine-Casparis Muni airport northeast bound at or above 6200 MSL then direct BWR NDB, continue climb in BWR NDB holding pattern (hold N, LT, 194° inbound) to 8600 before proceeding on course. Do not exceed 200 KIAS until established direct BWR NDB. When executing VCOA, notify ATC prior to departure. (ADF required)

NOTE: **Rwy 1**, Poles, sign and tree beginning 13' from DER, 228' right of centerline, up to 33' AGL/4472' MSL. Vehicles on road and fence beginning 10' from DER, 274' left of centerline, up to 15' AGL/4463' MSL. **Rwy 5**, vehicles on road, poles, tree, sign and antenna beginning 18' from DER, 165' right of centerline, up to 38' AGL/4477' MSL. Poles, trees and sign beginning 13' from DER, 240' left of centerline, up to 37' AGL/4476' MSL. **Rwy 19**, Vehicles on road, poles and terrain beginning 32' from DER, 60' right of centerline, up to 43' AGL/4562' MSL. Vehicles on road, poles, trees, sign and windmill beginning 2' from DER, 153' left of centerline, up to 37' AGL/4556' MSL.

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# TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES



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## AUSTIN, TX

AUSTIN-BERGSTROM INTL (AUS)

AMDT 1 06327 (FAA)

DEPARTURE PROCEDURE: **Rwys 35L, 35R**, climb via heading 353° to 1800 before turning left on course.

NOTE: **Rwy 17L**, trees beginning 498' from DER, 576' left of centerline, up to 80' AGL/517' MSL. Tree 617' from DER, 585' right of centerline, 55' AGL/498' MSL.

**Rwy 17R**, trees 1007' from DER, 739' right of centerline, up to 61' AGL/523' MSL. **Rwy 35R**, tree 817' from DER, 664' right of centerline, 55' AGL/528' MSL.

AUSTIN EXECUTIVE (EDC)

ORIG 10210 (FAA)

TAKEOFF MINIMUMS: **Rwys 16, 34**, NA-Environmental.

NOTE: **Rwy 31**, trees beginning 901' from DER, 258' left of centerline, up to 50' AGL/669' MSL. Utility poles beginning 929' from DER, 370' left of centerline, up to 135' AGL/749' MSL. Utility poles beginning 2326' from DER, 878' right of centerline, up to 105' AGL/704' MSL.

## BALLINGER, TX

BRUCE FIELD (E30)

ORIG 11265 (FAA)

NOTE: **Rwy 17**, trees beginning 1902' from DER, 661' right of centerline, up to 100' AGL/1859' MSL. **Rwy 35**, trees, building, and road beginning 29' from DER, 210' left of centerline, up to 100' AGL/1839' MSL. Tree and poles beginning 887' from DER, 429' right of centerline, up to 37' AGL/1772' MSL.

## BEEVILLE, TX

BEEVILLE MUNI (BEA)

ORIG 07186 (FAA)

TAKEOFF MINIMUMS: **Rwys 18, 36**, NA-environmental. **Rwy 30**, 300-2 or std. w/ min. climb of 239' per NM to 700.

NOTE: **Rwy 30**, tower 1.5 NM from DER 2566' right of centerline, 230' AGL/542' MSL.

## BIG LAKE, TX

REAGAN COUNTY (E41)

AMDT 1 06327 (FAA)

TAKEOFF MINIMUMS: **Rwys 9,27**, NA-environmental.

NOTE: **Rwy 16**, road 384' from DER, 603' right of centerline, 17' AGL/2716' MSL.

## BIGGS AAF (KBIF)

FORT BLISS, TX 07130

**Rwy 21**: Left turn direct to ELP VORTAC, continue climb via R-130 to airway MEA or as directed by ATC. **Rwy 3**: Right turn direct to ELP VORTAC, continue climb via R-130 to airway MEA or as directed by ATC.

## BRADY, TX

CURTIS FIELD (BBD)

ORIG 08045 (FAA)

TAKEOFF MINIMUMS: **Rwys 8, 26**, NA-Environmental. NOTES: **Rwy 17**, Light poles, trees, fence, terrain, and vehicle on road beginning 50' from DER, 362' left of centerline, up to 30' AGL/1827' MSL. Trees beginning 17' from DER, 216' right of centerline, up to 30' AGL/1818' MSL.

## BROWNSVILLE, TX

BROWNSVILLE/SOUTH PADRE ISLAND INTL (BRO)

ORIG 11293(FAA)

NOTE: **Rwy 13**, trees and bushes beginning 32' from DER, 399' left of centerline, up to 30' AGL/50' MSL. Trees, bushes, pole and building beginning 751' from DER, 191' right of centerline, up to 44' AGL/64' MSL. **Rwy 17**, trees and pole beginning 56' from DER, 61' left of centerline, up to 53' AGL/78' MSL. Trees and poles beginning 1011' from DER, 96' right of centerline, up to 44' AGL/69' MSL. **Rwy 31**, airplanes on taxiway beginning 371' from DER, 563' right of centerline, up to 45' AGL/64' MSL. Trees beginning 1141' from DER, 567' right of centerline, up to 37' AGL/52' MSL. **Rwy 35**, pole and trees beginning 695' from DER, 140' right of centerline, up to 56' AGL/71' MSL. Trees beginning 719' from DER, 84' left of centerline, up to 63' AGL/78' MSL.

## BROWNWOOD, TX

BROWNWOOD RGNL (BWD)

ORIG 11293 (FAA)

NOTE: **Rwy 13**, trees beginning 1523' from DER, 844' right of centerline, up to 47' AGL/1412' MSL. **Rwy 17**, trees beginning 797' from DER, 649' left of centerline, up to 33' AGL/1398' MSL. Trees beginning 691' from DER, 640' right of centerline, up to 31' AGL/1393' MSL. Building 737' from DER, 253' right of centerline, 29' AGL/1391' MSL. **Rwy 35**, trees beginning 77' from DER, 272' left of centerline, up to 49' AGL/1411' MSL. Trees beginning 771' from DER, 282' right of centerline, up to 46' AGL/1418' MSL.

## BURNET, TX

BURNET MUNI KATE CRADDOCK FIELD (BMQ)

AMDT 1 09351 (FAA)

NOTE: **Rwy 1**, trees and cars beginning 362' from DER, 488' right of centerline, up to 100' AGL/1379' MSL. Trees and cars beginning 274' from DER, 86' left of centerline, up to 100' AGL/1419' MSL. **Rwy 19**, trees beginning 32' from DER, 103' right of centerline, up to 100' AGL/1379' MSL. Trees beginning 188' from DER, 332' left of centerline, up to 100' AGL/1369' MSL.

## CARRIZO SPRINGS, TX

DIMMIT COUNTY (CZT)

ORIG 87267 (FAA)

DEPARTURE PROCEDURE: **Rwy 31**, climb runway heading to 1200 prior to left turn to avoid 1114' antenna west of airport.

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# TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES



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# TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES



## COLEMAN, TX

COLEMAN MUNI (COM)  
ORIG 11069 (FAA)

NOTE: **Rwy 15**, trees beginning 792' from DER, 67' right of centerline, up to 100' AGL/1774' MSL. **Rwy 33**, cranes beginning 1010' from DER, 28' left of centerline, up to 65' AGL/1774' MSL. Cranes beginning 2285' from DER, 13' right of centerline, up to 65' AGL/1774' MSL.

## COMANCHE, TX

COMANCHE COUNTY-CITY (MKN)  
ORIG 06047 (FAA)

TAKEOFF MINIMUMS: **Rwys 13, 31, NA**-Environmental.

NOTE: **Rwy 17**, road at DER, 134' right of centerline, 15' AGL/1394' MSL. Road 784' from DER, 324' right of centerline, 15' AGL/1404' MSL. **Rwy 35**, trees beginning 464' from DER, across centerline, up to 50' AGL/1429' MSL.

## CORPUS CHRISTI, TX

CORPUS CHRISTI INTL (CRP)  
AMDT 1 08101 (FAA)

TAKEOFF MINIMUMS: **Rwy 35**, 400-2¾ or std. w/min. climb of 229' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 31**, Climb heading 309° to 1200 before turning westbound.

NOTE: **Rwy 17**, antenna on building 24' AGL/64' MSL, 749' from DER, 694' left of centerline. **Rwy 35**, tower 401' AGL/423' MSL, 2.21 NM from DER, 3757' left of centerline.

## CORPUS CHRISTI NAS (TRUAX FLD) (KNGP)

CORPUS CHRISTI, TX. . . . . ORIG 08325

TAKEOFF OBSTACLES: **Rwy 13L**, Power line, 139' MSL, 3884' from DER, 457' left of centerline. Pylon, 112' MSL, 3304' from DER, 362' right of centerline. Pylon, 112' MSL, 3476' from DER, 1017' right of centerline. Pylon, 110' MSL, 3137' from DER, 299' left of centerline. Pylon, 107' MSL, 3561' from DER, 665' left of centerline. **Rwy 13R**, Power line, 139' MSL, 4434' from DER, 1208' left of centerline. Pylon, 100' MSL, 3686' from DER, 1050' left of centerline.

## COTULLA, TX

COTULLA-LA SALLE COUNTY (COT)  
ORIG 07354 (FAA)

NOTE: **Rwy 13**, road 2768' from DER, 53' left of centerline, 18' AGL/484' MSL. Tree 5520' from DER, 1764' left of centerline, 50' AGL/480' MSL. Tree 2 NM from DER, 778' left of centerline, 50' AGL/579' MSL. Tree 1264' from DER, 93' right of centerline, 50' AGL/499' MSL. Tree 1.3 NM from DER, 1116' right of centerline, 50' AGL/464' MSL. **Rwy 31**, railroad 2934' from DER, 153' right of centerline 23' AGL/472' MSL. Tree 1669' from DER, 66' right of centerline, 50' AGL/499' MSL. Tree 1.2 NM from DER, 2290' right of centerline, 50' AGL/562' MSL. Terrain beginning 80' from DER, 428' left of centerline, up to 496' MSL. Terrain 123' from DER, 379' right of centerline, 496' MSL.

## DEL RIO, TX

DEL RIO INTL (DRT)  
ORIG 99252 (FAA)

DEPARTURE PROCEDURE: **Rwy 13**, climb to 1500 prior to left turn.

## DEVINE, TX

DEVINE MUNI (23R)  
AMDT 1 11349 (FAA)

TAKEOFF MINIMUMS: **Rwy 35**, 300-1 or std. w/min. climb of 265' per NM to 900.

NOTE: **Rwy 17**, trees beginning 281' from DER, 383' left of centerline, up to 50' AGL/759' MSL. Trees beginning 1145' from DER, 233' left of centerline, up to 50' AGL/779' MSL. **Rwy 35**, trees beginning 4761' from DER, 128' right of centerline, up to 50' AGL/839' MSL.

## EAGLE PASS, TX

MAVERICK COUNTY MEMORIAL INTL (5TR)  
ORIG 08269 (FAA)

NOTE: **Rwy 13**, vehicle on road 171' from DER, 393' right of centerline, 15' AGL/894' MSL.

## EDINBURG, TX

SOUTH TEXAS INTL AT EDINBURG (EBG)  
ORIG 06271 (FAA)

TAKEOFF MINIMUMS: CAUTION: Unmarked balloon and cable to 15000' MSL in R-6317. **Rwy 14**, 276/37.9 NM, **Rwy 32**, 276/38.5 NM.

NOTE: **Rwy 14**, tree 1109' from DER, 525' right of centerline, 19' AGL/108' MSL. Terrain 20' from DER, 312' right of centerline, 0' AGL/74' MSL. **Rwy 32**, multiple poles beginning 831' from DER, 53' right of centerline, up to 32' AGL/111' MSL. Road 640' from DER, 671' right of centerline, 17' AGL/96' MSL.

## EL PASO, TX

EL PASO INTL (ELP)  
AMDT 6 11237 (FAA)

TAKEOFF MINIMUMS: **Rwys 8L, 26R**, NA - Environmental. **Rwy 26L**, std. w/min. climb of 490' per NM to 6300.

DEPARTURE PROCEDURE: **Rwy 4**, climbing right turn heading 120° and ELP R-150 to 9000, then proceed on course. **Rwy 8R**, climbing right turn heading 120° and ELP R-150 to 9000, then proceed on course. **Rwy 22**, climbing left turn heading 120° and ELP R-150 to 9000, then proceed on course. **Rwy 26L**, climbing left turn heading 120° and ELP R-150 to 9000, then proceed on course.

NOTE: **Rwy 4**, light poles beginning 1053' from DER, 746' left of centerline, 46' AGL/3986' MSL. **Rwy 26L**, light poles beginning 1249' from DER, 614' left of centerline, 60' AGL/3980' MSL. Windsock 114' from DER, 294' right of centerline, 22' AGL/3942' MSL.

## HORIZON (T27)

ORIG 11293 (FAA)

TAKEOFF MINIMUMS: **Rwy 26**, NA - ATC. DEPARTURE PROCEDURE: **Rwy 8**, climb heading 077° to 4900 before proceeding on course.

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# TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES



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## FALFURRIAS, TX

BROOKS COUNTY (BKS)

AMDT 1 09127 (FAA)

TAKEOFF MINIMUMS: **Rwy 32**, 400-2½ or std. w/ min. climb of 249' per NM to 600. **Rwy 35**, std. w/ min. climb of 250' per NM to 800, or 500-3 w/ min. climb of 242' per NM to 800, or 900-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 35**, for climb in visual conditions: cross Brooks County Airport at or above 900 MSL before proceeding on course.

NOTE: **Rwy 14**, vehicle on road, 29' from DER, 499' left of centerline, 15' AGL/129' MSL. Trees beginning 149' from DER, 523' left of centerline, up to 40' AGL/154' MSL. Trees beginning at DER, 415' right of centerline, up to 40' AGL/149' MSL. **Rwy 17**, vehicle on road, at DER, 364' left of centerline, 15' AGL/119' MSL. Trees beginning 15' from DER, 331' right of centerline, up to 40' AGL/149' MSL. Trees beginning 165' from DER, 126' left of centerline, up to 17' AGL/129' MSL. **Rwy 32**, road and trees beginning 587' from DER, 35' right of centerline, up to 40' AGL/149' MSL. Tower 1.9 NM from DER, 987' left of centerline, 298' AGL/418' MSL. **Rwy 35**, vehicle on road, at DER, 360' right of centerline, 15' AGL/118' MSL. Tree 1010' from DER, 278' right of centerline, 29' AGL/138' MSL. Tower 2.6 NM from DER, 426' right of centerline, 414' AGL/539' MSL.

## FORT HOOD, TX

ROBERT GRAY AAF (GRK)

NOTE: **Rwy 33**, pole 974' from DER, 746' left of centerline, 35' AGL/1050' MSL. Pole 1121' from DER, 746' left of centerline, 33' AGL/1048' MSL.

## FORT STOCKTON, TX

FORT STOCKTON-PECOS COUNTY (FST)

ORIG 09239 (FAA)

TAKEOFF MINIMUMS: **Rwys 7, 11, 16, 25, 29, 34**, NA-Environmental. **Rwy 21**, 300-1 or std. w/ min. climb of 280' per NM to 3600.

DEPARTURE PROCEDURE: **Rwy 21**, climb heading 208° to 3600 before turning left.

NOTE: **Rwy 12**, tree 899' from DER, 310' right of centerline, 39' AGL/3049' MSL. **Rwy 21**, brush beginning 110' from DER, 222' right of centerline, up to 20' AGL/3159' MSL. Terrain beginning 124' from DER, 77' right of centerline, up to 3173' MSL. Terrain beginning 56' from DER, 132' left of centerline, up to 3111' MSL. Bush 236' from DER, 30' left of centerline, 6' AGL/3013' MSL. Vehicle on road, 2017' from DER, 973' left of centerline, 17' AGL/3066' MSL. **Rwy 30**, trees beginning 64' from DER, 354' left of centerline, up to 6' AGL/2995' MSL.

## FREDERICKSBURG, TX

GILLESPIE COUNTY (T82)

AMDT 1 05020 (FAA)

DEPARTURE PROCEDURE: **Rwy 14**, climb via heading 139° to 2400 before proceeding on course.

**Rwy 32**, climb via heading 319° to 2400 before proceeding on course.

## GEORGE WEST, TX

LIVE OAK COUNTY (8TB)

ORIG 02164 (FAA)

TAKEOFF MINIMUMS: **Rwy 31**, 700-3 or std. with a min. climb of 230' per NM to 1000.

DEPARTURE PROCEDURE: **Rwy 13**, climb runway heading to 600 before turning right.

NOTE: **Rwy 31**, tower 22,101' from DER, 1716' left of centerline, 470' AGL/737' MSL.

## GEORGETOWN, TX

GEORGETOWN MUNI (GTU)

ORIG 10210 (FAA)

NOTE: **Rwy 11**, trees beginning 179' from DER, 278' left of centerline, up to 30' AGL/799' MSL. Trees beginning 318' from DER, 115' right of centerline, up to 30' AGL/799' MSL. Tower 5361' from DER, 515' right of centerline, 179' AGL/894' MSL. **Rwy 18**, trees beginning 293' from DER, 395' left of centerline, up to 30' AGL/789' MSL. Trees beginning 576' from DER, 15' right of centerline, up to 30' AGL/779' MSL. **Rwy 29**, trees beginning 394' from DER, 384' right of centerline, up to 30' AGL/829' MSL. Trees beginning 437' from DER, 237' left of centerline, up to 30' AGL/819' MSL. **Rwy 36**, trees beginning 276' from DER, 134' left of centerline, up to 30' AGL/819' MSL. Trees beginning 356' from DER, 282' right of centerline, up to 30' AGL/819' MSL. Tower 928' from DER, 684' right of centerline, 47' AGL/820' MSL.

## HAMILTON, TX

HAMILTON MUNI (MNZ)

ORIG 09351 (FAA)

NOTE: **Rwy 18**, tree 689' from DER, 211' left of centerline, 40' AGL/1346' MSL. Vehicle on North-South road 849' from DER, on extended centerline, 15' AGL/1321' MSL. **Rwy 36**, trees beginning 621' from DER, 186' left of centerline, 40' AGL/1359' MSL. Trees 879' from DER, 87' right of centerline, 40' AGL/1359' MSL.

## HARLINGEN, TX

VALLEY INTL (HRL)

ORIG 03303 (FAA)

NOTE: **Rwy 13**, pole 1031' from DER, 465' left of centerline, 38' AGL/68' MSL. Pole 1055' from DER, 475' left of centerline, 38' AGL/68' MSL. **Rwy 17R**, fence 24' from DER, 499' right of centerline, 8' AGL/41' MSL. **Rwy 17L**, road (non-interstate) 416' from DER, on runway centerline, 20' AGL/51' MSL. Road (non-interstate) 410' from DER, 520' left of centerline, 20' AGL/50' MSL. **Rwy 31**, tree 983' from DER, 462' left of centerline, 42' AGL/69' MSL.

## HEBBRONVILLE, TX

JIM HOGG COUNTY (HBV)

ORIG 10210 (FAA)

NOTE: **Rwy 13**, trees beginning 7' from DER, 59' left of centerline, up to 25' AGL/694' MSL. **Rwy 31**, trees beginning 112' from DER, 274' right of centerline to 438' left of centerline, up to 12' AGL/681' MSL. Pole 801' from DER, 374' right of centerline, up to 26' AGL/685' MSL. NDB 275' from DER, 495' left of centerline, up to 33' AGL/692' MSL. Vehicle on road 399' from DER, left and right of centerline, up to 15' AGL/674' MSL.

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# TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES



L5

## HONDO, TX

SOUTH TEXAS RGNL AT HONDO (HDO)

ORIG-A 11209 (FAA)

TAKEOFF MINIMUMS: **Rwys 4, 22**, NA-  
Environmental.

NOTE: **Rwy 8**, trees 407' from DER, 243' left of centerline, 30' AGL/959' MSL. **Rwy 17L**, vehicles on road 488' from DER, 131' right of centerline, 15' AGL/925' MSL. **Rwy 17R**, sand storage domes beginning 3653' from DER, 838' right of centerline, up to 115' AGL/1023' MSL. **Rwy 35R**, vehicles on road 161' from DER, 172' left of centerline, 15' AGL/943' MSL. Multiple trees beginning 636' from DER, 354' right of centerline, up to 26' AGL/955' MSL. Vehicles on road beginning 490' from DER, 122' right of centerline, 15' AGL/943' MSL. **Rwy 26**, trees 1022' from DER, 241' right of centerline, 30' AGL/959' MSL. **Rwy 13**, trees 726' from DER, 250' left of centerline, 30' AGL/939' MSL.

## HOOD AAF (KHLR)

FORT HOOD (KILLEEN), TX ... AMDT 2, 09351

TAKEOFF MINIMUMS: **Rwy 16, 34** Standard\*

\* For Copter use only.

## JUNCTION, TX

KIMBLE COUNTY (JCT)

AMDT 2 11125 (FAA)

TAKEOFF MINIMUMS: **Rwys 8, 26**, NA -  
Environmental. **Rwy17**, std. w/min. climb of 340' per NM to 2300 or 1300-3 for climb in visual conditions. **Rwy 35**, std. w/min. climb of 565' per NM to 2200 or 400-3 with minimum climb of 230' per NM to 2500, or 1300-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 17**, climb heading 172° to 2800 before proceeding on course, for climb in visual conditions cross Kimble County Airport at or above 2900 before proceeding on course. **Rwy 35**, for climb in visual conditions cross Kimble County Airport at or above 2900 before proceeding on course.

NOTE: **Rwy 17**, trees beginning abeam DER, 297' right of centerline, up to 50' AGL/1749' MSL. Power lines beginning 229' from DER, 370' right of centerline, up to 75' AGL/1744' MSL. Vehicles on road beginning 390' from DER, left and right of centerline, up to 17' AGL/1716' MSL. Trees beginning 1548' from DER, left and right of centerline, up to 50' AGL/2049' MSL. Radio towers beginning 4568' from DER, 736' left of centerline, up to 169' AGL/1854' MSL. **Rwy 35**, power lines beginning abeam DER, 545' left of centerline, up to 75' AGL/1854' MSL. Power lines abeam DER, 561' right of centerline, up to 75' AGL/1854' MSL. Vehicles on road beginning 1121' from DER, left and right of centerline, up to 15' AGL/1794' MSL. Trees beginning 1254' from DER, left and right of centerline, up to 50' AGL/2129' MSL.

## KENEDY, TX

KARNES COUNTY (2R9)

AMDT 1 11293 (FAA)

TAKEOFF MINIMUMS: **Rwy 34**, 400-2 or std. w/min. climb of 359' per NM to 900.

DEPARTURE PROCEDURE: **Rwy 34**, climb heading 344° to 900 before turning left.

NOTE: **Rwy 16**, trees beginning 85' from DER, 245' left of centerline, up to 35' AGL/304' MSL. Trees beginning 98' from DER, 206' right of centerline, up to 35' AGL/304' MSL. **Rwy 34**, trees beginning 321' from DER, 245' right of centerline, up to 35' AGL/318' MSL. Tower 1.4 NM from DER, 2809' left of centerline, 238' AGL/628' MSL.

## KERRVILLE, TX

KERRVILLE MUNI /LOUIS SCHREINER FIELD (ERV)

AMDT 1 11013 (FAA)

TAKEOFF MINIMUMS: **Rwy 3**, std. w/min. climb of 377' per NM to 2800 or 1000-3 for climb in visual conditions. **Rwy 30**, std. w/min. climb of 216' per NM to 2500 or 1000-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 3, 30**, for climb in visual conditions: cross Kerrville Muni/Louis Schreiner Field at or above 2600' MSL before proceeding on course.

NOTE: **Rwy 3**, trees and pole beginning 203' from DER, 46' left of centerline, up to 31' AGL/1692' MSL. Trees, poles, T-L towers beginning 136' from DER, 11' right of centerline, up to 30' AGL/1927' MSL. **Rwy 12**, terrain 62' from DER, 79' right of centerline, 1592' MSL. Terrain 66' from DER, 322' left of centerline, 1602' MSL. Tree 94' from DER, 321' right of centerline, 24' AGL/1597' MSL. Vehicle on road 211' from DER, 430' left of centerline, up to 15' AGL/1608' MSL. Terrain 267' from DER, 494' left of centerline, 1605' MSL. Tree 340' from DER, 472' right of centerline, 37' AGL/1609' MSL. Terrain 1065' from DER, 778' left of centerline, 1618' MSL. Tree 1663' from DER, 718' left of centerline, 41' AGL/1644' MSL. **Rwy 21**, trees, fence, and poles beginning 4' from DER, 239' right of centerline, up to 46' AGL/1608' MSL. Terrain 58' from DER, 18' right of centerline, 1588' MSL. Terrain 169' from DER, 368' left of centerline, 1588' MSL. Terrain 202' from DER, 239' right of centerline, 1585' MSL. Terrain 423' from DER, 533' left of centerline, 1595' MSL. Tree 1082' from DER, 166' left of centerline, 42' AGL/1610' MSL. **Rwy 30**, trees and poles beginning 248' from DER, 121' left of centerline, up to 61' AGL/1611' MSL. Trees, antennas, and poles beginning 275' from DER, 266' right of centerline, up to 42' AGL/1615' MSL.

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# TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES



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# TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

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## KILLEEN, TX

SKYLARK FIELD (ILE)

AMDT 2 09015 (FAA)

DEPARTURE PROCEDURE: **Rwy 19**, climb heading 190° to 1900 before turning east.

NOTE: **Rwy 1**, multiple poles beginning 317' from DER, 384' left of centerline, up to 27' AGL/868' MSL. Tree, 973' from DER, 100' left of centerline, 28' AGL/876' MSL. Building, 486' from DER, 9' right of centerline, 13' AGL/854' MSL. Antenna, 351' from DER, 277' right of centerline, 11' AGL/852' MSL. **Rwy 19**, pole, 288' from DER, 588' right of centerline, 32' AGL/880' MSL. Building, 102' from DER, 411' right of centerline, 8' AGL/856' MSL. Vehicle on road, 232' from DER, 499' right of centerline, 15' AGL/867' MSL. Pole, 256' from DER, 497' left of centerline, 32' AGL/873' MSL. Building, 276' from DER, 342' left of centerline, 11' AGL/859' MSL. Building, 298' from DER, 83' left of centerline, 9' AGL/857' MSL.

## KINGSVILLE, TX

KLEBERG COUNTY (IKG)

ORIG 10210 (FAA)

NOTE: **Rwy 13**, trees beginning 528' from DER, 515' right of centerline, up to 35' AGL/154' MSL. Trees beginning 775' from DER, 554' left of centerline, up to 35' AGL/159' MSL. **Rwy 31**, trees beginning 184' from DER, 358' right of centerline, up to 28' AGL/153' MSL.

## LACKLAND AFB (KELLY FLD ANNEX) (KSKF)

SAN ANTONIO, TX . . . . . 12068

TAKEOFF OBSTACLES: **Rwy 33**, trees 50' AGL/743' MSL, 1763' from DER, 919' left of centerline.

## LAGO VISTA, TX

LAGO VISTA TX-RUSTY ALLEN (RYW)

ORIG 10210 (FAA)

NOTE: **Rwy 15**, trees beginning 542' from DER, 300' left of centerline, up to 30' AGL/1229' MSL. Trees beginning 626' from DER, 188' right of centerline, up to 30' AGL/1229' MSL. **Rwy 33**, trees beginning 632' from DER, 182' left of centerline, up to 30' AGL/1279' MSL. Trees beginning 504' from DER, 232' right of centerline, up to 30' AGL/1269' MSL.

## LAKEWAY, TX

LAKEWAY AIRPARK (3R9)

AMDT 2 13010 (FAA)

TAKEOFF MINIMUMS: **Rwys 16, 34**, 1000-2 ½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 16, 34**, for climb in visual conditions, cross Lakeway Airpark at or above 1800 before proceeding on course. When executing VCOA, notify ATC prior to departure.

NOTE: **Rwy 16**, vehicles on road 4' from DER, 496' right of centerline, 15' AGL/954' MSL. Trees beginning 10' from DER, left and right of centerline, up to 50' AGL/1249' MSL. Building 38' from DER, 229' right of centerline, 50' AGL/989' MSL. Power line beginning 172' from DER, left and right of centerline, up to 79' AGL/998' MSL. **Rwy 34**, buildings and trees abeam DER, left and right of runway, up to 50' AGL/1009' MSL. Vehicles on road beginning 3' from DER, left and right of centerline, up to 15' AGL/974' MSL.

## LAMPASAS, TX

LAMPASAS (LZZ)

ORIG 09351 (FAA)

NOTE: **Rwy 16**, building 39' from DER, 374' left of centerline, 20' AGL/1189' MSL. Trees beginning 795' from DER, 217' right of centerline, up to 30' AGL/1189' MSL. **Rwy 34**, trees beginning 657' from DER, 147' left of centerline, up to 30' AGL/1249' MSL.

## LAREDO, TX

LAREDO INTL (LRD)

AMDT 4 11293 (FAA)

DEPARTURE PROCEDURE: **Rwy 14**, climb heading 139° to 1000 before turning right. **Rwy 17L**, climb heading 160° to 1200 before turning right. **Rwy 17R**, climb heading 160° to 1300 before turning right. **Rwy 32**, climb heading 319° to 1200 before turning left. **Rwys 35L, 35R**, climb heading 355° to 1000 before turning left.

NOTE: **Rwy 14**, trees beginning 135' from DER, 298' left of centerline, up to 59' AGL/519' MSL. Sign 226' from DER, 244' left of centerline, 14' AGL/474' MSL. **Rwy 17L**, terrain beginning 48' from DER, 333' right of centerline, up to 478' MSL. **Rwy 17R**, terrain beginning 4' from DER, 219' right of centerline, up to 489' MSL. Light poles beginning 894' from DER, 344' right of centerline, up to 41' AGL/511' MSL. **Rwy 32**, aircraft on taxiway beginning 50' from DER, 367' left of centerline, up to 75' AGL/584' MSL. Trees beginning 768' from DER, 584' left of centerline, up to 59' AGL/559' MSL. Trees beginning 88' from DER, 275' right of centerline, up to 59' AGL/559' MSL. **Rwy 35L**, MALSR 5' from DER, on centerline, 5' AGL/505' MSL. Navaid 10' from DER, on centerline, 5' AGL/505' MSL. Antenna on building 81' from DER, 404' left of centerline, 30' AGL/520' MSL. **Rwy 35R**, terrain beginning 19' from DER, 191' left of centerline, up to 500' MSL. Terrain beginning 176' from DER, 489' right of centerline, up to 512' MSL.

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# TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES



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## LAUGHLIN AFB (KDLF),

DEL RIO, TX ..... 12348

TAKE-OFF OBSTACLES: **Rwy 13C**, Taxiing aircraft 14' AGL/1079' MSL, 197' from DER, 222' right of centerline. **Rwy 13L**, Taxiing aircraft 14' AGL/1076' MSL, 9' from DER, 204' right of centerline. **Rwy 13R**, Taxiing aircraft 38' AGL/1108' MSL, 1159' from DER, 175' left of centerline. Taxiing aircraft 14' AGL/1090' MSL, 14' from DER, 202' left of centerline. Taxiing aircraft 14' AGL/1090' MSL, 65' from DER, 301' left of centerline. Taxiing aircraft 14' AGL/1093' MSL, 524' from DER, 605' right of centerline. Taxiing aircraft 14' AGL/1093' MSL, 1163' from DER, 599' right of centerline. **Rwy 31C**, Vehicular traffic 10' AGL/1092' MSL, 16' from DER, 466' right of centerline. **Rwy 31L**, Taxiing aircraft 14' AGL/1091' MSL, 196' from DER, 174' right of centerline. Vehicular traffic 10' AGL/1088' MSL, 861' from DER, 549' left of centerline. Taxiing aircraft 14' AGL/1094' MSL, 329' from DER, 329' right of centerline. Taxiing aircraft 14' AGL/1089' MSL, 177' from DER, 170' left of centerline. Pole 8' AGL/1084' MSL, 228' from DER, 567' left of centerline. Pole 8' AGL/1083' MSL, 397' from DER, 625' left of centerline. Pole 8' AGL/1084' MSL, 344' from DER, 682' left of centerline. **Rwy 31R**, Terrain 1082' MSL, 0' from DER, 500' left of centerline. Terrain 1083' MSL, 141' from DER, 516' left of centerline. Terrain 1083' MSL, 173' from DER, 546' left of centerline. Vehicular traffic 10' AGL/1092' MSL, 609' from DER, 534' left of centerline. Terrain 1085' MSL, 115' from DER, 521' right of centerline. Terrain 1083' MSL, 72' from DER, 449' right of centerline. Taxiing aircraft 14' AGL/1090' MSL, 6' from DER, 174' left of centerline. Railroad 23' AGL/1102' MSL, 1423' from DER, 469' right of centerline. Windsock 26' AGL/1101' MSL, 19' from DER, 496' left of centerline. Railroad 23' AGL/1102' MSL, 1239' from DER, 869' left of centerline.

## LLANO, TX

LLANO MUNI (AQO)

ORIG 09351 (FAA)

TAKEOFF MINIMUMS: **Rwys 13, 31**, NA-Environmental.

DEPARTURE PROCEDURE: **Rwy 35**, climb heading 354° to 1900 before proceeding on course.

NOTE: **Rwy 17**, tree 11' from DER, 364' left of centerline, 25' AGL/1144' MSL. Trees 811' from DER, 242' left of centerline, 25' AGL/1124' MSL. **Rwy 35**, hangar 209' from DER, 497' right of centerline, 30' AGL/1149' MSL. Tree 485' from DER, 265' right of centerline, 25' AGL/1144' MSL. Vehicles on North-South road, 270' left of centerline, 15' AGL/1114' MSL. Vehicles on road 390' from DER, crosses centerline East-West, 15' AGL/1134' MSL.

## LOCKHART, TX

LOCKHART MUNI (50R)

ORIG 11237 (FAA)

TAKEOFF MINIMUMS: **Rwy 36**, 400-3 or std. w/min. climb of 275' per NM to 1200.

DEPARTURE PROCEDURE: **Rwy 36**, climb heading 355° to 1200 before turning.

NOTE: **Rwy 18**, trees beginning 47' from DER, 267' left of centerline, up to 65' AGL/555' MSL. Trees beginning 245' from DER, 13' right of centerline, up to 42' AGL/541' MSL. **Rwy 36**, bush 51' from DER, 305' right of centerline, 8' AGL/568' MSL. Pole 1298' from DER, 561' right of centerline, 38' AGL/568' MSL. Tower 2.2 NM from DER, 2536' right of centerline, 378' AGL/918' MSL.

## MARFA, TX

MARFA MUNI (MRF)

AMDT1 11013 (FAA)

TAKEOFF MINIMUMS: CAUTION: Unmarked balloon and cable to 14000' MSL in R-6318. **Rwys 8, 26**, NA-Environmental.

DEPARTURE PROCEDURE: **Rwy 4**, climbing right turn direct MRF VOR/DME, thence...

**Rwy 13**, climb direct MRF VOR/DME, thence...

**Rwys 22, 31**, climbing left turn direct MRF VOR/DME, thence... All aircraft climb in MRF holding pattern (Hold SE, left turns, 313° inbound) to cross MRF VOR/DME at or above MEA for direction of flight.

NOTE: **Rwy 4**, trees beginning 899' from DER, 310' left of centerline, up to 50' AGL/4929' MSL. Vehicles on road beginning 176' from DER, 175' left of centerline, up to 15' AGL/4874' MSL. **Rwy 13**, vehicles on road beginning 544' from DER, left and right of centerline, up to 15' AGL/4854' MSL. **Rwy 22**, building and greenhouses beginning 28' from DER, 493' left of centerline, up to 35' AGL/4864' MSL.

## MASON, TX

MASON COUNTY (T92)

AMDT 1 12320 (FAA)

TAKEOFF MINIMUMS: **Rwy 36**, 300-1 or std. w/min. climb of 299' per NM to 1800.

DEPARTURE PROCEDURE: **Rwy 18**, climb heading 181° to 2100' before turning right.

NOTE: **Rwy 13**, terrain beginning 305' from DER, 99' right of centerline, up to 1500' MSL. Terrain beginning 36' from DER, 106' left of centerline, up to 1520' MSL.

**Rwy 18**, terrain beginning 163' from DER, 185' right of centerline, up to 1520' MSL. **Rwy 36**, terrain beginning 361' from DER, 6' left of centerline, up to 1533' MSL. TL tower 3061' from DER, 1185' left of centerline, 95' AGL/1628' MSL. Multiple TL towers beginning 3940' from DER, 194' left of centerline, 85' AGL/1636' MSL. Multiple TL towers beginning 4427' from DER, 304' right of centerline, 90' AGL/1667' MSL.

## MC ALLEN, TX

MC ALLEN MILLER INTL (MFE)

AMDT 1 08353 (FAA)

TAKEOFF MINIMUMS: **Rwy 36**, 300-2½, or std. with a min. climb of 298' per NM to 500'.

NOTE: **Rwy 13**, multiple trees beginning 792' from DER, 593' left of centerline, 44' AGL/159' MSL. **Rwy 31**, multiple trees beginning 708' from DER, 361' left of centerline, 43' AGL/157' MSL. Multiple trees beginning 1018' from DER, 626' right of centerline, 38' AGL/142' MSL. **Rwy 36**, light pole 581' from DER, on centerline, 17' AGL/122' MSL. Multiple buildings and trees beginning 624' from DER, 36' left of centerline, 24' AGL/129' MSL. Tower 197' from DER, 335' left of centerline, 38' AGL/140' MSL. Multiple buildings, poles, and towers beginning 635' from DER, right of centerline, 25' AGL/394' MSL.

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# TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES



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## TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES



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## MIDLAND, TX

MIDLAND AIRPARK (MDD)

AMDT 3 10294 (FAA)

TAKEOFF MINIMUMS: **Rwy 16**, 400-2½ or std. w/ min.

climb of 211' per NM to 3300, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1700' prior to DER. **Rwy 25**, 300-2 or standard with minimum climb of 208' per NM to 3100, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1300' prior to DER.

NOTE: **Rwy 7**, multiple light poles beginning 317' from DER, 245' left of centerline, up to 52' AGL/2863' MSL. Vehicle on road 88' from DER, 444' left of centerline, 17' AGL/2820' MSL. Tree 174' from DER, 360' left of centerline 60' AGL/2801' MSL. Bush 218' from DER, 442' right of centerline, up to 12' AGL/2797' MSL. **Rwy 16**, multiple trees and poles beginning 196' from DER, 291' right of centerline, up to 52' AGL/2842' MSL. Trees beginning 857' from DER, 228' left of centerline, up to 60' AGL/2842' MSL. Building 2.1 NM from DER, 3680' left of centerline, 354' AGL/3134' MSL. Bush 37' from DER, 491' right of centerline, up to 12' AGL/2803' MSL. **Rwy 25**, multiple light poles beginning 151' from DER, 12' right of centerline up to 52' AGL/2876' MSL. Trees beginning 1192' from DER, 41' right of centerline up to 60' AGL/2846' MSL. Multiple buildings beginning 1417' from DER, 433' left of centerline, 40' AGL/2851' MSL. Vehicle on road 203' from DER, 347' right of centerline, 17' AGL/2835' MSL. Sign 1202' from DER, 206' left of centerline 35' AGL/2835' MSL. **Rwy 34**, Trees beginning 839' from DER, 329' right of centerline, up to 60' AGL/2850' MSL. Light pole 635' from DER, 611' right of centerline 52' AGL/2843' MSL. Vehicle on road 572' from DER, 424' left of centerline 17' AGL/2833' MSL.

## MIDLAND INTL (MAF)

AMDT 1 12264 (FAA)

TAKEOFF MINIMUMS: **Rwy 34L**, 300-1½ or std. w/min. climb of 400' per NM to 3200. **Rwy 34R**, 300-1½ or std. w/ min. climb of 320' per NM to 3200.

NOTE: **Rwy 4**, trees beginning 24' from DER, 34' right of centerline, up to 40' AGL/2903' MSL. Rods, towers, and domes beginning 1231' from DER, 442' left of centerline, up to 108' AGL/2963' MSL. **Rwy 10**, rods, antennas, and lights beginning 72' from DER, 40' right of centerline, up to 20' AGL/2874' MSL. Trees, poles, and signs beginning 1296' from DER, 457' left of centerline, up to 40' AGL/2913' MSL. **Rwy 16L**, signs and poles beginning 94' from DER, 20' left of centerline, up to 30' AGL/2877' MSL. Railroad beginning 530' from DER, 17' left of centerline, 23' AGL/2869' MSL. Vehicles on road beginning 301' from DER, 268' left of centerline, 17' AGL/2862' MSL. **Rwy 16R**, pole 1794' from DER, 975' right of centerline, 55' AGL/2906' MSL. **Rwy 22**, tower, poles, lights, and antenna beginning 111' from DER, 66' right of centerline, up to 102' AGL/2986' MSL. Hangars 1112' from DER, 600' right of centerline, 55' AGL/2906' MSL. Tower, poles, and sign beginning 83' from DER, 62' left of centerline, up to 120' AGL/2971' MSL. **Rwy 34L**, drilling rigs beginning 201' from DER, 178' right of centerline, up to 165' AGL/3037' MSL. Drilling rigs beginning 3228' from DER, 769' left of centerline, 165' AGL/3056' MSL. **Rwy 34R**, vehicles on road beginning 256' from DER, 10' right of centerline, up to 17' AGL/2881' MSL. Trees and bushes beginning 171' from DER, 80' right of centerline, up to 40' AGL/2878' MSL. Poles and fence beginning 28' from DER, 109' right of centerline, up to 38' AGL/2903' MSL. Fence beginning 83' from DER, 271' left of centerline, 8' AGL/2872' MSL. Windmill, poles and trees beginning 1239' from DER, 116' left of centerline, up to 66' AGL/2913' MSL. Drilling rig 5540' from DER, 267' left of centerline, 165' AGL/3025' MSL.

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## MONAHANS, TX

ROY HURD MEMORIAL (E01)

AMDT 1 12152 (FAA)

TAKEOFF MINIMUMS: **Rwy 1**, 400-1½ or std. w/ min. climb of 434' per NM to 3100. **Rwy 12**, 300-1 or std. w/min. climb of 552' per NM to 2900.

NOTE: **Rwy 1**, vehicles on road, trees, and power line and poles beginning 185' from DER, left and right of centerline, up to 40' AGL/2649' MSL. Tower 1.2 NM from DER, 211' right of centerline, 303' AGL/2928' MSL. **Rwy 12**, bush 75' from DER, 479' left of centerline, 12' AGL/2617' MSL. Trees and a pole beginning 778' from DER, 23' right of centerline, up to 31' AGL/2641' MSL. Trees beginning 1041' from DER, 29' left of centerline, up to 42' AGL/2652' MSL. Tower 2283' from DER, 909' left of centerline, 130' AGL/2744' MSL. **Rwy 19**, vehicle on road 215' from DER, 457' right of centerline, 15' AGL/2624' MSL. **Rwy 30**, fence, railroad, poles, and trees beginning 56' from DER, 106' right of centerline, up to 44' AGL/2649' MSL. Vehicle on road, light pole, building, and poles beginning 294' from DER, 41' left of centerline, up to 50' AGL/2655' MSL.

## NEW BRAUNFELS, TX

NEW BRAUNFELS RGNL (BAZ)

ORIG 06215 (FAA)

DEPARTURE PROCEDURE: **Rwy 31**, climb heading 308° to 2600 before turning right. **Rwy 35**, climb heading 353° to 2200 before turning left.

NOTE: **Rwy 31**, multiple trees and antenna beginning 1125' from DER, 592' left of centerline, up to 47' AGL/706' MSL. Road 1014' from DER, 439' right of centerline, 15' AGL/687' MSL.

## ODESSA, TX

ODESSA-SCHLEMEYER FIELD (ODO)

AMDT 3 12208 (FAA)

TAKEOFF MINIMUMS: **Rwy 20**, 300-2½ or std. w/ min. climb of 225' per NM to 3400, or alternatively, with standard takeoff minimum and a normal 200' per NM climb gradient, takeoff must occur no later than 2100' prior to DER.

NOTE: **Rwy 2**, Vehicles on roadway 184' from DER left and right of centerline, up to 13' AGL/3013' MSL. **Rwy 16**, Building 466' from DER, 487' left of centerline, 50' AGL/3029' MSL. Power lines 960' from DER left and right of centerline, 30' AGL/2988' MSL. **Rwy 20**, Tower 2 NM from DER, 1311' left of centerline, 340' AGL/3287' MSL. **Rwy 29**, Rising terrain, trees and poles beginning 8' from DER, 495' right of centerline, up to 27' AGL/3012' MSL. **Rwy 34**, Vehicles on roadway beginning 48' from DER, left and right of centerline, up to 16' AGL/3001' MSL. Hangars 739' from DER, 628' left of centerline, 25' AGL/3012' MSL. Antenna 1104' from DER, 185' right of centerline, 45' AGL/3032' MSL.

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# TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES



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## OZONA, TX

OZONA MUNI (OZA)  
AMDT 1 03191 (FAA)

TAKEOFF MINIMUMS: **Rwy 16**, 300-1 or std. with a min. climb of 445' per NM to 2700. **Rwy 34**, 200-1½ or std. with a min. climb of 380' per NM to 2600.

NOTE: **Rwy 16**, trees 3686' from DER, 354' left of centerline, 100' AGL/2560' MSL. Trees 4436' from DER, 355' left of centerline, 100' AGL/2574' MSL. **Rwy 34**, trees 1363' from DER, 638' left of centerline, 100' AGL/2529' MSL. Trees 3479' from DER, 791' left of centerline, 100' AGL/2535' MSL. Trees 7679' from DER, 932' left of centerline, 100' AGL/2593' MSL.

## PEARSALL, TX

MC KINLEY FIELD (T30)  
ORIG 11321 (FAA)

NOTE: **Rwy 13**, trees beginning abeam DER, 300' left of centerline, up to 40' AGL/605' MSL. Transmission lines beginning 1777' from DER, across centerline, up to 80' AGL/642' MSL. **Rwy 31**, train on track 496' from DER, across centerline, 23' AGL/610' MSL. Vehicle on road 291' from DER, across centerline, 15' AGL/602' MSL.

## PECOS, TX

PECOS MUNI (PEQ)  
ORIG 12264 (FAA)

NOTE: **Rwy 14**, bush 170' from DER, 252' right of centerline, up to 7' AGL/2607' MSL. **Rwy 32**, bush 129' from DER, 348' left of centerline, up to 9' AGL/2614' MSL.

## PLEASANTON, TX

PLEASANTON MUNI (PEZ)  
AMDT 1 08325 (FAA)

NOTE: **Rwy 16**, vehicle on road 108' from DER, 285' left of centerline, 15' AGL/424' MSL. Fence 135' from DER, 194' left of centerline, 3' AGL/412' MSL. Fence 235' from DER, 38' right of centerline, 3' AGL/412' MSL. Trees beginning 246' from DER, 56' left of centerline, up to 100' AGL/529' MSL. Trees beginning 173' from DER, 154' right of centerline, up to 100' AGL/529' MSL. **Rwy 34**, vehicle on road 136' from DER, left to right of centerline, up to 15' AGL/444' MSL. Fence 191' from DER, 251' left of centerline, 3' AGL/442' MSL. Trees beginning 210' from DER, 51' left of centerline, up to 100' AGL/539' MSL. Tree 172' from DER, 74' right of centerline, 100' AGL/529' MSL.

## PORT ARANSAS, TX

MUSTANG BEACH (RAS)  
AMDT 1 09015 (FAA)

NOTE: **Rwy 12**, transmission towers and poles beginning 43' from DER, 28' right of centerline, up to 81' AGL/86' MSL. Building 2435' from DER, 967' right of centerline, 130' AGL/135' MSL. Transmission towers and poles beginning 1141' from DER, 13' left of centerline, up to 83' AGL/88' MSL. **Rwy 30**, boat 1657' from DER, 915' left of centerline, 50' AGL/50' MSL.

## PORT ISABEL, TX

PORT ISABEL-CAMERON COUNTY (PIL)  
AMDT 2 08213 (FAA)

TAKEOFF MINIMUMS: **Rwy 17**, 400-2 or std. with a min. climb of 253' per NM to 500.

NOTE: **Rwy 3**, trees beginning 178' from DER, 27' left of centerline, up to 100' AGL/114' MSL. **Rwy 8**, trees beginning 2046' from DER, 511' right of centerline, up to 100' AGL/119' MSL. Trees beginning 1981' from DER, 118' right of centerline, up to 100' AGL/119' MSL. **Rwy 13**, trees beginning 530' from DER, 32' left of centerline, up to 100' AGL/119' MSL. **Rwy 17**, trees beginning 911' from DER, 84' left of centerline, up to 100' AGL/119' MSL. **Rwy 35**, trees beginning 15' from DER, 4' left of centerline, up to 100' AGL/114' MSL.

## ROBSTOWN, TX

NUECES COUNTY (RBO)  
AMDT 1 12264 (FAA)

TAKEOFF MINIMUMS: **Rwy 13**, std. w/min. climb of 264' per NM to 1400 or 1400-2½ for climb in visual conditions. DEPARTURE PROCEDURE: **Rwy 13**, climb heading 129° to 1400 before turning eastbound or northbound. For climb in visual conditions, cross Nueces County airport at or above 1300' MSL before proceeding on course. When executing VCOA, notify ATC prior to departure. **Rwy 31**, climb heading 309° to 700 before turning southeast bound.

NOTE: **Rwy 13**, tower 4.8 NM from DER, 5070' right of centerline, 989' AGL/1049' MSL. Poles beginning 1005' from DER, 347' right of centerline, up to 42' AGL/116' MSL. Poles, vehicles on road, post, transmission tower and grain bin/silo beginning at DER, 69' left of centerline, up to 62' AGL/136' MSL. **Rwy 31**, vehicles on road and pole beginning 2' from DER, 250' right of centerline, 15' AGL/93' MSL.

## ROCKPORT, TX

ARANSAS COUNTY (RKP)  
ORIG 07074 (FAA)

NOTE: **Rwy 14**, road plus vehicle 500' from DER, 593' left of centerline, 17' AGL/40' MSL. **Rwy 18**, antenna 5599' from DER, 602' left of centerline, 160' AGL/171' MSL. **Rwy 32**, road plus vehicle 291' from DER, 533' left of centerline, 17' AGL/40' MSL. **Rwy 36**, road plus vehicle 576' from DER, 597' left of centerline, 17' AGL/40' MSL.

## ROCKSPRINGS, TX

EDWARDS COUNTY (ECU)  
ORIG 06271 (FAA)

NOTE: **Rwy 14**, multiple trees beginning 1076' from DER, 22' right of centerline, up to 100' AGL/2459' MSL. **Rwy 32**, fence 101' from DER, 35' left of centerline, 5' AGL/2374' MSL. Multiple trees beginning 318' from DER, 71' left of centerline, up to 100' AGL/2479' MSL. Multiple trees beginning 992' from DER, 532' right of centerline, up to 100' AGL/2479' MSL.

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# TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES



L9

SC-3



## SAN ANGELO, TX

SAN ANGELO RGNL/MATHIS FIELD (SJT)

AMDT 1 10238 (FAA)

DEPARTURE PROCEDURE: **Rwy 27**, climb to 2500 before turning right. **Rwy 36**, climb to 2600 before turning left.

NOTE: **Rwy 3**, fence 8' from DER, 490' right of centerline, 3' AGL/1896' MSL. **Rwy 18**, multiple trees and poles beginning 112' from DER, 183' left of centerline, up to 43' AGL/1962' MSL. Multiple trees and poles beginning 1076' from DER, 114' right of centerline, up to 47' AGL/1966' MSL. Catenary 1779' from DER, 457' right of centerline, 45' AGL/1964' MSL. **Rwy 27**, multiple trees beginning 482' from DER, 74' left of centerline, up to 24' AGL/1933' MSL. Light pole 1040' from DER, 252' left of centerline, 22' AGL/1931' MSL. Tree 538' from DER, 226' right of centerline, 21' AGL/1930' MSL.

## SAN ANTONIO, TX

BOERNE STAGE FIELD (5C1)

ORIG 07018 (FAA)

DEPARTURE PROCEDURE: **Rwy 35**, climb heading 346° to 2800 before turning westbound.

NOTE: **Rwy 17**, multiple trees and light poles along tree line beginning 6' from DER, 128' right of centerline, up to 50' AGL/1427' MSL. Multiple trees and light poles along tree line beginning 81' from DER, 144' left of centerline, up to 50' AGL/1409' MSL. **Rwy 35**, multiple trees and poles beginning 204' from DER, 7' left of centerline, up to 50' AGL/1422' MSL. Multiple trees and poles beginning 205' from DER, 24' right of centerline, up to 50' AGL/1423' MSL. Hangar 80' from DER, 222' right of centerline, up to 50' AGL/1397' MSL.

## SAN ANTONIO INTL (SAT)

AMDT 1 12320 (FAA)

NOTE: **Rwy 12R**, antenna on RTR tower, 1034' from DER, 723' right of centerline, 42' AGL/820' MSL. Building 3801' from DER, 1488' right of centerline, 177' AGL/881' MSL. **Rwy 22**, antenna on hanger and flagpole, 1198' from DER, 700' right of centerline, 39' AGL/825' MSL. Poles beginning 2209' from DER, 1041' right of centerline, up to 23' AGL/869' MSL. Sign 2713' from DER, 1034' right of centerline, 71' AGL/857' MSL. **Rwy 30L**, pole 1931' from DER, 911' left of centerline, 42' AGL/867' MSL. Poles beginning 2356' from DER, 913' left of centerline, up to 42' AGL/892' MSL. Sign 2435' from DER, 1032' right of centerline, 42' AGL/873' MSL. Tower 2766' from DER, 834' left of centerline, 54' AGL/891' MSL. **Rwy 30R**, rod on OL GS 1261' from DER, 591' left of centerline, 57' AGL/854' MSL.

## SAN ANTONIO, TX (CON'T)

STINSON MUNI (SSF)

AMDT 2 08045 (FAA)

TAKEOFF MINIMUMS: **Rwy 9**, Std. w/ min climb of 225' per NM to 1900 or 1000-2½ for climb in visual conditions. **Rwy 27**, 300-1¼ or std. w/ min. climb of 221' per NM to 900, or alternatively, with standard takeoff minimums and normal 200' per NM climb gradient, takeoff must occur no later than 1700' prior to DER.

DEPARTURE PROCEDURE: **Rwy 9**, For climb in visual conditions, cross Stinson Muni Airport at or above 1400 MSL before proceeding on course. **Rwy 14**, Climb heading 137° to 1200 before turning left. **Rwy 32**, Climb heading 317° to 1500 before turning right.

NOTES: **Rwy 9**, Vehicle on road 285' from DER, 380' left of centerline, 15' AGL/584' MSL. Trees beginning 1653' from DER, 435' right of centerline, up to 70' AGL/629' MSL. **Rwy 14**, Vehicle on road 114' from DER, on centerline extending 373' left of centerline, up to 15' AGL/564' MSL. Trees beginning 72' from DER, 79' right of centerline, up to 70' AGL/607' MSL. Trees beginning 232' from DER, 54' left of centerline, up to 70' AGL/618' MSL. Transmission line tower 4205' from DER, 133' right of centerline, 119' AGL/663' MSL. **Rwy 27**, Fence 41' from DER, 30' right of centerline, 8' AGL/584' MSL. Vehicle on road 108' from DER, 202' right of centerline, 15' AGL/584' MSL. Vehicle on road 123' from DER, 113' right of centerline, 15' AGL/596' MSL. Trees and poles beginning 229' from DER, 117' right of centerline, up to 70' AGL/645' MSL. Trees and poles beginning 599' from DER, 6' left of centerline, up to 70' AGL/634' MSL. Tank beginning 1.32 NM from DER, 1338' right of centerline, 179' AGL/799' MSL. Building 1422' from DER, 432' right of centerline, 40' AGL/627' MSL. Building 2133' from DER, 36' left of centerline, 55' AGL/635' MSL. **Rwy 32**, Fence 17' from DER, 80' left of centerline, 8' AGL/578' MSL. Vehicle on road 54' from DER, 199' left of centerline, 15' AGL/586' MSL. Trees beginning 164' from DER, 125' right of centerline, up to 70' AGL/639' MSL. Trees and poles beginning 43' from DER, 41' left of centerline, up to 75' AGL/668' MSL.

## SAN MARCOS, TX

SAN MARCOS MUNI (HYI)

AMDT 2 13066 (FAA)

DEPARTURE PROCEDURE: **Rwy 31**, climb heading 306° to 1500 before turning right. **Rwy 35**, climb heading 006° to 2500 before turning left.

NOTE: **Rwy 8**, sign 1' from DER, 250' left of centerline, 3' AGL/583' MSL. Tree 942' from DER, 259' left of centerline, 34' AGL/612' MSL. **Rwy 13**, trees beginning 2505' from DER, 90' right of centerline, up to 80' AGL/646' MSL. **Rwy 17**, bush 27' from DER. 74' left of centerline, 2' AGL/576' MSL. **Rwy 26**, runway end identifier light 8' from DER, 91' right of centerline, 4' AGL/589' MSL. Trees beginning 1072' from DER, 394' right of centerline, up to 50' AGL/638' MSL. Pole 1216' from DER, 552' right of centerline, 43' AGL/638' MSL. **Rwy 31**, trees beginning 911' from DER, left and right of centerline, up to 34' AGL/631' MSL. Pole 1056' from DER, 630' right of centerline, 33' AGL/621' MSL. **Rwy 35**, sign 24' from DER, 199' left of centerline, 3' AGL/597' MSL. Vehicles on road beginning 410' from DER, 719' right of centerline, up to 15' AGL/614' MSL. Trees beginning 3226' from DER, left and right of centerline, up to 49' AGL/738' MSL. Telephone line 4571' from DER, 107' right of centerline, 47' AGL/719' MSL.

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**SINTON, TX**

ALFRED C. BUBBA THOMAS (T69)

ORIG 93091 (FAA)

DEPARTURE PROCEDURE: **Rwy 14**, climb runway heading to 800 prior to turning east.**SONORA, TX**

SONORA MUNI (SOA)

AMDT 1 93259 (FAA)

TAKEOFF MINIMUMS: **Rwy 18**, 700-2. **Rwy 36**, 300-1.**TEMPLE, TX**

DRAUGHON-MILLER CENTRAL TEXAS RGNL (TPL)

AMDT 4 10266 (FAA)

DEPARTURE PROCEDURE: **Rwy 2**, climb on heading between 085° CW to 200° from DER, or climb on heading between 200° CW to 345° from DER to 3600 before proceeding on course or minimum climb of 250' per NM to 3200 for all other courses. **Rwy 33**, climb on heading between 070° CW to 155° from DER, or climb on heading between 155° CW to 330° from DER to 3600 before proceeding on course or minimum climb of 240' per NM to 3200 for all other courses.

NOTE: **Rwy 2**, tree 279' from DER, 362' right of centerline, 11' AGL/680' MSL. Bushes and tree beginning 176' from DER, 416' left of centerline, up to 30' AGL/699' MSL. **Rwy 15**, bush 60' from DER, 210' left of centerline, 11' AGL/680' MSL. **Rwy 20**, hangars beginning 548' from DER, 571' right of centerline, up to 18' AGL/697' MSL. **Rwy 33**, trees beginning 307' from DER, 474' right of centerline, up to 32' AGL/701' MSL.

**TAYLOR, TX**

TAYLOR MUNI (T74)

ORIG 08269 (FAA)

NOTE: **Rwy 17**, numerous trees beginning at DER, 180' right of centerline up to 50' AGL/591' MSL. Terrain beginning 1700' from DER, 380' left of centerline, up to 601' MSL.

**UVALDE, TX**

GARNER FIELD (UVA)

ORIG 11125 (FAA)

NOTE: **Rwy 15**, trees and poles beginning 70' from DER, 374' left of centerline, up to 100' AGL/1039' MSL. Trees and poles beginning 208' from DER, 359' right of centerline, up to 100' AGL/1059' MSL. **Rwy 33**, vehicle on roadway 622' from DER, left and right of centerline, up to 15' AGL/966' MSL. Trees beginning 744' from DER, 636' left of centerline, up to 100' AGL/1059' MSL. Trees beginning 861' from DER, 269' right of centerline, up to 100' AGL/1049' MSL.

**VAN HORN, TX**

CULBERSON COUNTY (VHN)

TAKEOFF MINIMUMS: **Rwys 17, 21**, 2100-2 or std. with a min. climb of 500' per NM to 5000. **Rwy 25**, NA.

DEPARTURE PROCEDURE: **Rwys 3,17,21,35**, climb runway heading to 5000 then climbing right turn direct VHN NDB and climb in VHN NDB holding pattern to MEA, before proceeding on course. **Rwy 7**, climb runway heading to 5000 then climbing left turn direct VHN NDB and climb in VHN NDB holding pattern to MEA, before proceeding on course.

**WACO, TX**

MC GREGOR EXECUTIVE (PWG)

AMDT 2 90347 (FAA)

TAKEOFF MINIMUMS: **Rwys 4, 17, 22, 35**, 2000-3 or std. with a min. climb of 280' per NM to 3000.

DEPARTURE PROCEDURE: **Rwys 17,22**, climb via ACT R-195 to 3000 before proceeding on course. **Rwys 4, 35**, climb runway heading to 3000 before proceeding on course.

**TSTC-WACO (CNW)**

ORIG 08269 (FAA)

NOTE: **Rwy 17L**, terrain 198' from DER, 467' right of centerline, 464' MSL. **Rwy 17R**, vehicle on road 137' from DER, 487' right of centerline, 15' AGL/474' MSL. Trees beginning 872' from DER, 238' right of centerline, up to 100' AGL/529' MSL. Trees beginning 1239' from DER, 74' left of centerline, up to 100' AGL/512' MSL. **Rwy 35L**, trees beginning 3386' from DER, 529' left of centerline, up to 100' AGL/579' MSL. **Rwy 35R**, trees beginning 2606' from DER, 1042' right of centerline, up to 100' AGL/579' MSL. Tree 2094' from DER, 910' left of centerline, 45' AGL/524' MSL.

**WACO RGNL (ACT)**

ORIG 10266 (FAA)

NOTE: **Rwy 1**, rising terrain beginning 11' from DER, 34' right of centerline, up to 504' MSL. Pole 1170' from DER, 593' left of centerline, 34' AGL/534' MSL. Tree 1674' from DER, 794' right of centerline, 80' AGL/581' MSL. **Rwy 19**, rod 590' from DER, 257' right of centerline, 40' AGL/524' MSL. **Rwy 32**, trees beginning 501' from DER, 17' left of centerline, up to 70' AGL/562' MSL. Trees beginning 836' from DER, 30' right of centerline, up to 80' AGL/609' MSL.

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## WESLACO, TX

MID VALLEY (T65)

ORIG 12068 (FAA)

DEPARTURE PROCEDURE: **Rwy 13**, climbing left turn heading 006° to intercept MFE R-075 to 1800 before proceeding on course.

NOTE: **Rwy 13**, vehicles on roadway beginning 7' from DER, left and right of centerline, up to 15' AGL/89' MSL. Flagpole 107' from DER, 424' left of centerline, 21' AGL/89' MSL. Multiple trees, poles and buildings beginning 200' from DER, 261' left of centerline, up to 44' AGL/111' MSL. Multiple trees and poles beginning 490' from DER, 269' right of centerline, up to 39' AGL/108' MSL. Tower 511' from DER, 635' left of centerline, 60' AGL/131' MSL. Catenaries beginning 1260' from DER, 337' right of centerline, up to 38' AGL/107' MSL. Trees beginning 3649' from DER, 1278' left of centerline, up to 100' AGL/169' MSL.

**Rwy 31**, Vehicles on roadway beginning 335' from DER, 233' right of centerline, up to 15' AGL/84' MSL. Catenary 381' from DER, 527' right of centerline, 25' AGL/92' MSL. Poles beginning 420' from DER, 388' right of centerline, up to 26' AGL/93' MSL. Pole 1114' from DER, 525' left of centerline, 33' AGL/100' MSL. Catenary 1211' from DER, 651' left of centerline, 36' AGL/102' MSL. Trees beginning 1350' from DER, 440' right of centerline, up to 100' AGL/169' MSL. Trees beginning 1078' from DER, 448' left of centerline, up to 36' AGL/100' MSL.

## WINK, TX

WINKLER COUNTY (INK)

ORIG-A 11069 (FAA)

DEPARTURE PROCEDURE: **Rwy 13**, climb heading 147° to 3400 before proceeding on course.

NOTE: **Rwy 4**, power lines beginning 524' from DER, right and left of centerline, up to 30' AGL/2829' MSL. Trees beginning 742' from DER, right and left of centerline, up to 50' AGL/2859' MSL. **Rwy 13**, trees beginning 133' from DER, 307' right of centerline, up to 50' AGL/2822' MSL. Vehicles on road beginning 535' from DER, right and left of centerline, up to 15' AGL/2829' MSL. **Rwy 31**, trees beginning 49' from DER, 396' left of centerline, up to 50' AGL/2832' MSL. Trees beginning 1563' from DER, 585' right of centerline, up to 50' AGL/2874' MSL.

## WINTERS, TX

WINTERS MUNI (77F)

ORIG 11237 (FAA)

NOTE: **Rwy 17**, multiple trees and fence beginning 428' from DER, 45' left of centerline, up to 25' AGL/1914' MSL. Multiple trees and terrain beginning 110' from DER, 188' right of centerline, up to 12' AGL/1895' MSL.

## YOAKUM, TX

YOAKUM MUNI (T85)

ORIG 11069 (FAA)

NOTE: **Rwy 13**, vehicle on road, 179' from DER, 237' left of centerline, up to 15' AGL/364' MSL. **Rwy 31**, vehicle on road, 77' from DER, 257' right of centerline, up to 15' AGL/384' MSL.

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